

WE CLAIM:

Fig 6

1 1. A method of crediting viewing with respect to  
2 a viewing window being displayed on a screen, wherein the  
3 viewing window has a size, wherein the screen has a size,  
4 and wherein the method comprises the following steps:

5 a) applying a predetermined crediting rule to the  
6 viewing window; and,

7 b) crediting viewing with respect to the viewing  
8 window only if the viewing window meets the predetermined  
9 crediting rule.

1 2. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization, and wherein step b) comprises the step of  
4 crediting viewing with respect to the viewing window only if  
5 the viewing window is not minimized.

1 3. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimum window size, and wherein step b) comprises the step  
4 of crediting viewing with respect to the viewing window only

5 if the size of the viewing window is greater than the  
6 minimum window size.

1 4. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises an  
3 amount of occlusion of the viewing window, and wherein step  
4 b) comprises the step of crediting viewing with respect to  
5 the viewing window only if the amount of occlusion of the  
6 viewing window is less than a maximum occlusion.

1 5. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises a  
3 percentage of the screen occupied by the viewing window, and  
4 wherein step b) comprises the step of crediting viewing with  
5 respect to the viewing window only if the percentage of the  
6 screen occupied by the viewing window is greater than a  
7 minimum percentage.

1 6. The method of claim 1 wherein the viewing  
2 window is a first viewing window, wherein a second viewing  
3 window is displayed on the screen, wherein audio is being  
4 played with respect to one of the first and second viewing  
5 windows, and wherein step b) comprises the step of crediting

6 viewing only with respect to the one of the first and second  
7 viewing windows associated with the audio.

1 7. The method of claim 1 wherein the viewing  
2 window is a first viewing window, wherein a second viewing  
3 window is displayed on the screen, wherein one of the first  
4 and second viewing windows is larger, and wherein step b)  
5 comprises the step of crediting viewing only with respect to  
6 the larger of the first and second viewing windows.

1 8. The method of claim 1 wherein the viewing  
2 window is a first viewing window, wherein a second viewing  
3 window is displayed on the screen, wherein one of the first  
4 and second viewing windows is a top-most viewing window, and  
5 wherein step b) comprises the step of crediting viewing only  
6 with respect to the top-most viewing window.

1 9. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization and minimum window size, and wherein step b)  
4 comprises the step of crediting viewing with respect to the  
5 viewing window only if the viewing window is not minimized

1 and the size of the viewing window is greater than the  
2 minimum window size.

1 10. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization and amount of occlusion of the viewing window,  
4 and wherein step b) comprises the step of crediting viewing  
5 with respect to the viewing window only if the viewing  
6 window is not minimized and the amount of occlusion of the  
7 viewing window is less than a maximum occlusion.

1 11. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization and a percentage of the screen occupied by the  
4 viewing window, and wherein step b) comprises the step of  
5 crediting viewing with respect to the viewing window only if  
6 the viewing window is not minimized and the percentage of  
7 the screen occupied by the viewing window is greater than a  
8 minimum percentage.

1           12. The method of claim 1 wherein the  
2           predetermined crediting rule applied in step a) comprises  
3           minimum window size and an amount of occlusion of the  
4           viewing window, and wherein step b) comprises the step of  
5           crediting viewing with respect to the viewing window only if  
6           the size of the viewing window is greater than the minimum  
7           window size and the amount of occlusion of the viewing  
8           window is less than a maximum occlusion.

1           13. The method of claim 1 wherein the  
2           predetermined crediting rule applied in step a) comprises  
3           minimum window size and a percentage of the screen occupied  
4           by the viewing window, and wherein step b) comprises the  
5           step of crediting viewing with respect to the viewing window  
6           only if the size of the viewing window is greater than the  
7           minimum window size and the percentage of the screen  
8           occupied by the viewing window is greater than a minimum  
9           percentage.

1           14. The method of claim 1 wherein the  
2           predetermined crediting rule applied in step a) comprises an  
3           amount of occlusion of the viewing window and a percentage  
4           of the screen occupied by the viewing window, and wherein

1 step b) comprises the step of crediting viewing with respect  
2 to the viewing window only if the amount of occlusion of the  
3 viewing window is less than a maximum occlusion and the  
4 percentage of the screen occupied by the viewing window is  
5 greater than a minimum percentage.

1 15. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization, minimum window size, and an amount of  
4 occlusion of the viewing window, and wherein step b)  
5 comprises the step of crediting viewing with respect to the  
6 viewing window only if the viewing window is not minimized  
7 and the size of the viewing window is greater than the  
8 minimum window size and the amount of occlusion of the  
9 viewing window is less than a maximum occlusion.

1 16. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization, minimum window size, and a percentage of the  
4 screen occupied by the viewing window, and wherein step b)  
5 comprises the step of crediting viewing with respect to the  
6 viewing window only if the viewing window is not minimized  
7 and the size of the viewing window is greater than the

1 minimum window size and the percentage of the screen  
2 occupied by the viewing window is greater than a minimum  
3 percentage.

1 17. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimum window size, an amount of occlusion of the viewing  
4 window, and a percentage of the screen occupied by the  
5 viewing window, and wherein step b) comprises the step of  
6 crediting viewing with respect to the viewing window only if  
7 the size of the viewing window is greater than the minimum  
8 window size and the amount of occlusion of the viewing  
9 window is less than a maximum occlusion and the percentage  
10 of the screen occupied by the viewing window is greater than  
11 a minimum percentage.

1 18. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization, an amount of occlusion of the viewing window,  
4 and a percentage of the screen occupied by the viewing  
5 window, and wherein step b) comprises the step of crediting  
6 viewing with respect to the viewing window only if the  
7 viewing window is not minimized and the amount of occlusion

1 of the viewing window is less than a maximum occlusion and  
2 the percentage of the screen occupied by the viewing window  
3 is greater than a minimum percentage.

1 19. The method of claim 1 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization, minimum window size, an amount of occlusion of  
4 the viewing window, and a percentage of the screen occupied  
5 by the viewing window, and wherein step b) comprises the  
6 step of crediting viewing with respect to the viewing window  
7 only if the viewing window is not minimized and the size of  
8 the viewing window is greater than the minimum window size  
9 and the amount of occlusion of the viewing window is less  
10 than a maximum occlusion and the percentage of the screen  
11 occupied by the viewing window is greater than a minimum  
12 percentage.

1 20. The method of claim 1 wherein steps a) and b)  
2 are implemented by software written in Java.



Fig 4 Sub A1

1 21. A method of metering video displayed in a  
2 window on a screen of a viewing device comprising the  
3 following steps:

4 a) determining whether the viewing device has a  
5 COM interface or an API interface;

6 b) if the viewing device has a COM interface,  
7 determining channel data from a channel related object of  
8 the COM interface, and,

9 c) if the viewing device has an API interface,  
10 calling the API interface so as to determine channel data  
11 associated with a video application.

1 22. The method of claim 21 comprising the further  
2 following step:

3 d) determining a program and/or station from an  
4 electronic programming guide based upon the channel data  
5 determined in step b) or c).

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1 23. The method of claim 21 comprising the further  
2 following step:

3 d) if the viewing device has neither a COM  
4 interface nor an API interface, determining channel data  
5 from window controls within a viewing application.

1                   24. The method of claim 23 comprising the further  
2 following step:

3                   e) determining a program and/or station from an  
4 electronic programming guide based upon the channel data  
5 determined in step b) or c).

1                   25. The method of claim 23 comprising the further  
2 following steps:

3                   e) finding main windows;

4                   f) finding a video application main window from  
5 the main windows found in step e);

6                   g) finding child windows of the video application  
7 main window found in step f);

8                   h) finding a channel related child window from the  
9 child windows found in step g); and,

10                   i) determining channel data from the channel  
11 related child window found in step h).

1                   26. The method of claim 25 wherein step f)  
2 comprises the following step:

3                   using a callback function to find the video  
4 application main window from the main windows.

1           27. The method of claim 25 wherein step h)  
2 comprises the following step:  
3           using a callback function to find the channel  
4 related child window.

1           28. The method of claim 25 comprising the further  
2 following step:  
3           determining a program and/or station from an  
4 electronic programming guide based upon the channel data  
5 determined in step i).

1           29. The method of claim 21 wherein the viewing  
2 device is a computer.

1           30. The method of claim 21 wherein the viewing  
2 device is a television.

1           31. The method of claim 21 wherein the viewing  
2 device is a combination of a television and a set top box.

1           32. The method of claim 21 wherein steps a), b),  
2 and c) are implemented by software written in Java.

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1 33. A software meter arranged to meter video  
2 displayed in a window on a screen of a viewing device, the  
3 software meter being executed by a processor, the software  
4 meter comprising:

5 a) first program code executable to determine  
6 tuning data from a video application related to the  
7 displayed video; and,

8 b) second program code executable to determine an  
9 ancillary identification code relating to displayed video.

1 34. The software meter of claim 33 wherein the  
2 second program code determines the ancillary identification  
3 code from a device driver.

1 35. The software meter of claim 42 wherein the  
2 device driver is a device driver for a video tuning card.

1 36. The software meter of claim 33 further  
2 comprising third program code arranged to determine a  
3 program and/or station from an electronic programming guide  
4 based upon the tuning data.

37. The software meter of claim 33 wherein the first program code is arranged to (i) determine whether the viewing device has a COM interface or an API interface, (ii) determine channel data from a channel related object of a COM interface if the viewing device has the COM interface, and (iii) determine channel data from application related data associated with a video application if the viewing device has an API interface.

38. The software meter of claim 37 wherein the first program code is arranged to determine channel data from window text if the viewing device has neither a COM interface nor an API interface.

39. The software meter of claim 38 further comprising third program code arranged to determine a program and/or station from an electronic programming guide based upon the tuning data.

40. The software meter of claim 38 wherein the first program code is arranged to (i) find main windows, (ii) find a video application main window from the main windows, (iii) find child windows of the video application

5 main window, (iv) find a channel related child window from  
6 the child windows, and (v) determine channel data from the  
7 channel related child window.

1 41. The software meter of claim 40 wherein the  
2 first program code is arranged to use a callback function in  
3 order to find the video application main window from the  
4 main windows.

1 42. The software meter of claim 40 wherein the  
2 first program code is arranged to use a callback function to  
3 find the channel related child window.

1 43. The software meter of claim 40 further  
2 comprising third program code arranged to determine a  
3 program and/or station from an electronic programming guide  
4 based upon the tuning data.

1 44. The software meter of claim 33 wherein the  
2 software meter is written in Java.

1           45. A metering system for metering viewing of  
2 video displayed in a window on a screen of a viewing device  
3 comprising:

4           a software meter arranged to determine identifying  
5 data related to the video displayed in the window; and,  
6           a creditor arranged to apply a crediting rule in  
7 determining whether to credit the identifying data.

1           46. The metering system of claim 45 wherein the  
2 crediting rules comprises minimization, and wherein the  
3 creditor comprises program code to credit the identifying  
4 data only if the viewing window is not minimized.

1           47. The metering system of claim 45 wherein the  
2 crediting rules comprises minimum window size, and wherein  
3 the creditor comprises program code to credit the  
4 identifying data only if the size of the viewing window is  
5 greater than the minimum window size.

1           48. The metering system of claim 45 wherein the  
2 crediting rules comprises an amount of occlusion of the  
3 viewing window, and wherein the creditor comprises program  
4 code to credit the identifying data only if the amount of

5 occlusion of the viewing window is less than a maximum  
6 occlusion.

1 49. The metering system of claim 45 wherein the  
2 crediting rules comprises a percentage of the screen  
3 occupied by the viewing window, and wherein the creditor  
4 comprises program code to credit the identifying data only  
5 if the percentage of the screen occupied by the viewing  
6 window is greater than a minimum percentage.

1 50. The metering system of claim 45 wherein the  
2 viewing window is a first viewing window, wherein a second  
3 viewing window is displayed on the screen, wherein audio is  
4 being played with respect to one of the first and second  
5 viewing windows, and wherein the creditor comprises program  
6 code to credit the identifying data only with respect to the  
7 one of the first and second viewing windows associated with  
8 the audio.

1 51. The metering system of claim 45 wherein the  
2 viewing window is a first viewing window, wherein a second  
3 viewing window is displayed on the screen, wherein one of  
4 the first and second viewing windows is a larger viewing



1 window, and wherein the creditor comprises program code to  
2 credit the identifying data only with respect to the larger  
3 viewing window.

1 52. The metering system of claim 45 wherein the  
2 viewing window is a first viewing window, wherein a second  
3 viewing window is displayed on the screen, wherein one of  
4 the first and second viewing windows is a top-most viewing  
5 window, and wherein the creditor comprises program code to  
6 credit the identifying data only with respect to the top-  
7 most viewing window.

1 53. The metering system of claim 45 wherein the  
2 crediting rules comprises minimization and minimum window  
3 size, and wherein the creditor comprises program code to  
4 credit the identifying data only if the viewing window is  
5 not minimized and the size of the viewing window is greater  
6 than the minimum window size.

1 54. The metering system of claim 45 wherein the  
2 crediting rules comprises minimization and an amount of  
3 occlusion of the viewing window, and wherein the creditor  
4 comprises program code to credit the identifying data only

5 if the viewing window is not minimized and the amount of  
6 occlusion of the viewing window is less than a maximum  
7 occlusion.

1 55. The metering system of claim 45 wherein the  
2 crediting rules comprises minimization and a percentage of  
3 the screen occupied by the viewing window, and wherein the  
4 creditor comprises program code to credit the identifying  
5 data only if the viewing window is not minimized and the  
6 percentage of the screen occupied by the viewing window is  
7 greater than a minimum percentage.

1 56. The metering system of claim 45 wherein the  
2 crediting rules comprises minimum window size and an amount  
3 of occlusion of the viewing window, and wherein the creditor  
4 comprises program code to credit the identifying data only  
5 if the size of the viewing window is greater than the  
6 minimum window size and the amount of occlusion of the  
7 viewing window is less than a maximum occlusion.

1           57. The metering system of claim 45 wherein the  
2           crediting rules comprises minimum window size and a  
3           percentage of the screen occupied by the viewing window, and  
4           wherein the creditor comprises program code to credit the  
5           identifying data only if the size of the viewing window is  
6           greater than the minimum window size and the percentage of  
7           the screen occupied by the viewing window is greater than a  
8           minimum percentage.

1           58. The metering system of claim 45 wherein the  
2           crediting rules comprises an amount of occlusion of the  
3           viewing window and a percentage of the screen occupied by  
4           the viewing window, and wherein the creditor comprises  
5           program code to credit the identifying data only if the  
6           amount of occlusion of the viewing window is less than a  
7           maximum occlusion and the percentage of the screen occupied  
8           by the viewing window is greater than a minimum percentage.

1           59. The metering system of claim 45 wherein the  
2           crediting rules comprises minimization, minimum window size,  
3           and an amount of occlusion of the viewing window, and  
4           wherein the creditor comprises program code to credit the  
5           identifying data only if the viewing window is not minimized

6 and the size of the viewing window is greater than the  
7 minimum window size and the amount of occlusion of the  
8 viewing window is less than a maximum occlusion.

1 60. The metering system of claim 45 wherein the  
2 crediting rules comprises minimization, minimum window size,  
3 and a percentage of the screen occupied by the viewing  
4 window, and wherein the creditor comprises program code to  
5 credit the identifying data only if the viewing window is  
6 not minimized and the size of the viewing window is greater  
7 than the minimum window size and the percentage of the  
8 screen occupied by the viewing window is greater than a  
9 minimum percentage.

1 61. The metering system of claim 45 wherein the  
2 crediting rules comprises minimum window size, an amount of  
3 occlusion of the viewing window, and a percentage of the  
4 screen occupied by the viewing window, and wherein the  
5 creditor comprises program code to credit the identifying  
6 data only if the size of the viewing window is greater than  
7 the minimum window size and the amount of occlusion of the  
8 viewing window is less than a maximum occlusion and the

9 percentage of the screen occupied by the viewing window is  
10 greater than a minimum percentage.

1 62. The metering system of claim 45 wherein the  
2 predetermined crediting rule applied in step a) comprises  
3 minimization, an amount of occlusion of the viewing window,  
4 and a percentage of the screen occupied by the viewing  
5 window, and wherein step b) comprises the step of crediting  
6 viewing with respect to the viewing window only if the  
7 viewing window is not minimized and the amount of occlusion  
8 of the viewing window is less than a maximum occlusion and  
9 the percentage of the screen occupied by the viewing window  
10 is greater than a minimum percentage.

1 63. The metering system of claim 45 wherein the  
2 crediting rules comprises minimization, minimum window size,  
3 an amount of occlusion of the viewing window, and a  
4 percentage of the screen occupied by the viewing window, and  
5 wherein the creditor comprises program code to credit the  
6 identifying data only if the viewing window is not minimized  
7 and the size of the viewing window is greater than the  
8 minimum window size and the amount of occlusion of the  
9 viewing window is less than a maximum occlusion and the

10 percentage of the screen occupied by the viewing window is  
11 greater than a minimum percentage.

1 64. The metering system of claim 45 wherein the  
2 software meter has first program code to determine whether  
3 the viewing device has a COM interface or an API interface  
4 and second program code to determine channel data from a  
5 channel related object of the COM interface or from  
6 application related data associated with a video application  
7 through the API interface.

1 65. The metering system of claim 64 wherein the  
2 software meter has third program code to determine a program  
3 and/or station from an electronic programming guide based  
4 upon the channel data.

1 66. The metering system of claim 64 wherein the  
2 software meter has third program code to determine channel  
3 data from window text if the viewing device has neither a  
4 COM interface nor an API interface.

1           67. The metering system of claim 66 wherein the  
2 software meter has fourth program code to determine a  
3 program and/or station from an electronic programming guide  
4 based upon the channel data.

1           68. The metering system of claim 66 wherein the  
2 software meter has fourth program code to find main windows,  
3 wherein the software meter has fifth program code to find a  
4 video application main window from the main windows, wherein  
5 the software meter has sixth program code to find child  
6 windows of the video application main window, wherein the  
7 software meter has seventh program code to find a channel  
8 related child window from the child windows, and wherein the  
9 software meter has eighth program code to determine channel  
10 data from the channel related child window.

1           69. The metering system of claim 68 wherein the  
2 fourth program code uses a callback function to find the  
3 video application main window from the main windows.

1           70. The metering system of claim 68 wherein the  
2 sixth program code uses a callback function to find the  
3 channel related child window.

1           71. The metering system of claim 68 wherein the  
2 software meter has ninth program code to determine a program  
3 and/or station from an electronic programming guide based  
4 upon the channel data.

1           72. The metering system of claim 45 wherein the  
2 software meter comprises:

3           a) first program code executable to determine  
4 tuning data from a video application related to the  
5 displayed video; and,

6           b) second program code executable to determine an  
7 ancillary identification code relating to displayed video.

1           73. The metering system of claim 72 wherein the  
2 second program code determines the ancillary identification  
3 code from a device driver.

1           74. The metering system of claim 73 wherein the  
2 device driver is a device driver for a video tuning card.



1           75. The metering system of claim 72 comprising  
2 third program code arranged to determine a program and/or  
3 station from an electronic programming guide based upon the  
4 tuning data.

1           76. The metering system of claim 72 wherein the  
2 first program code is arranged to (i) determine whether the  
3 viewing device has a COM interface or an API interface, (ii)  
4 determine channel data from a channel related object of a  
5 COM interface if the viewing device has the COM interface,  
6 and (iii) determine channel data from application related  
7 data associated with a video application if the viewing  
8 device has an API interface.

1           77. The metering system of claim 76 wherein the  
2 first program code is arranged to determine channel data  
3 from window text if the viewing device has neither a COM  
4 interface nor an API interface.

1           78. The metering system of claim 77 comprising  
2 third program code arranged to determine a program and/or  
3 station from an electronic programming guide based upon the  
4 tuning data.

1           79. The metering system of claim 77 wherein the  
2 first program code is arranged to (i) find main windows,  
3 (ii) find a video application main window from the main  
4 windows, (iii) find child windows of the video application  
5 main window, (iv) find a channel related child window from  
6 the child windows, and (v) determine channel data from the  
7 channel related child window.

1           80. The metering system of claim 79 wherein the  
2 first program code is arranged to use a callback function in  
3 order to find the video application main window from the  
4 main windows.

1           81. The metering system of claim 79 wherein the  
2 first program code is arranged to use a callback function to  
3 find the channel related child window.

1           82. The metering system of claim 79 comprising  
2 third program code arranged to determine a program and/or  
3 station from an electronic programming guide based upon the  
4 tuning data.

1                   83. The metering system of claim 45 wherein the  
2       software meter is written in Java.